PERSONAL COMPUTER SYSTEMS

ATARI®

1981 SOFTWARE CATALOG

ATARI®

ATARI®

A Warner Communications Company

BUSINESS APPLICATIONS

ATARI® ACCOUNTANT™

The ATARI Accountant brings the most sophisticated computerized accounting to the small business or professional person. Three packages are available—General Accounting System (CX401), Accounts Receivable System (CX402), and Inventory Control System (CX403). Each can be used alone or together for your business accounting. Even an accounting primer is included. Each package consists of several diskettes. Requires ATARI 800™ with 48K RAM, ATARI 815™ Dual Disk Drive, ATARI 850™ Interface Module, and ATARI 825™ 80-Column Printer.

ATARI WORD PROCESSOR (CX404) (See PROFESSIONAL APPLICATIONS for description)

PERSONAL FINANCE & RECORD KEEPING

PERSONAL FINANCIAL MANAGEMEMT SYSTEM™ (CX406)

The ATARI Personal Financial Management System is a database-oriented system designed to help you plan and analyze your budget. It keeps track of all financial transactions, including cash, checking accounts, savings accounts, and credit card use. You can look up past checks, credit card expenses or cash expenses. Records can also be displayed by budget category, date or payee.

It also allows you to set budget goals and receive charts and printouts that follow budget progress. You can analyze your budget by selecting expense categories (food, automobile, medical, savings, mortgage, and other payments) and see what percentage each one is of your total budget. The program will also allow you to use present data to forecast future trends. Diskette. Requires the ATARI 810 Disk Drive and a minimum of 32K RAM. ATARI Printer optional.

INVESTMENT ANALYSIS SERIES

The Investment Analysis Series of programs includes Bond Analysis, Stock Analysis, Stock Charting and Mortgage & Loan Analysis. You can use these programs to analyze your current investments and to help determine which investments to make in the future.

BOND ANALYSIS (CX8106)

Use your ATARI 800 Personal Computer System to study and calculate bond investments. The Bond Analysis diskette program features two analysis programs:

1. **Bond Price and Interest** computes the price and accrued interest for a given bond and provides the annual coupon in dollars, the redemption value, the maturity, and the yield.
2. **Bond Yield** calculates the before and after tax yield of a given bond using two tax rates, one for ordinary income and one for capital gains. You provide the computer with the present price, time to maturity, and tax rates for both ordinary income and capital gains.

Each of the Bond Analysis Programs requires 24K of RAM and the ATARI 810 Disk Drive.

MORTGAGE & LOAN ANALYSIS (CX4115)

The Mortgage & Loan Analysis program cassette allows you to compare mortgage terms, including monthly payments and total interest payments, with varying rates of interest. (For example, the monthly payments and total interest paid on mortgages of $10,000 and $100,000, at interest rates of 15.5% and 16% for 25 and 30 year mortgages). This program requires 16K of RAM and the ATARI 410™ Program Recorder.

STOCK ANALYSIS (CX8107)

Analyze your stock investments using the ATARI Stock Analysis Program. This diskette contains three programs:

1. **Portfolio Analysis** is used to evaluate portfolios. The computer uses statistical measures of return and variance to calculate the arithmetic mean and standard deviation for one or more stocks.
2. **Stock Rate of Return** allows you to analyze the performance of a stock over a range of time. It computes and displays annual rates of return. You provide the dividend per share and the closing stock price and the computer performs the calculations.
3. **Stock Dividend Analysis** calculates the intrinsic value of a stock. Compute the discounted present value of the estimated dividends. The program computes the length of time a growth rate must continue or the price/earnings ratio that must be reached to make the intrinsic value equal to the current market price.

These programs require 24K of RAM and the ATARI 810 Disk Drive.

STOCK CHARTING (CX8108)

With the Stock Charting program diskette you can track and study selected stocks and their market performance. This program allows you to retrieve, list, and graph data entered on a daily basis. The graph includes a 6-day oscillator, closing quotes, volume and 10-day moving average. A blank, formatted diskette is included for storage of your portfolio data. This program requires 24K of RAM and the ATARI 810 Disk Drive.

MAILING LIST (CX4104)

Use the ATARI Mailing List program cassette to keep a record of names and addresses for Christmas cards, birthdays, or club activities. A General List program is included, which you can use to save other types of lists, like household inventory, insurance policies, recipes, hobbies, tapes and records. A List Customizer program lets you modify either of the List programs to the specific format you need. You can sort the data alphabetically and print labels or lists with an optional ATARI Printer. Requires a minimum of 24K of RAM and the ATARI 410 Program Recorder. Disk Drive optional.

PERSONAL INTEREST & DEVELOPMENT

The following are BASIC programs designed to teach, entertain and stimulate the mind.

AN INVITATION TO PROGRAMMING™ 1, 2, and 3

These lessons are designed to teach the fundamentals of programming in ATARI BASIC. A recorded voice asks you questions, waits for you to respond, and indicates whether you are correct or incorrect. These self-teaching courses will teach you to use BASIC programming statements as well as the color, graphics, sound and music capabilities of the ATARI Personal Computers. Each lesson requires 8K of RAM and the ATARI 410 Program Recorder.

AN INVITATION TO PROGRAMMING 1: FUNDAMENTALS OF PROGRAMMING (CX4101)

This program consists of six lessons, which introduce you to the ATARI keyboard, teach you to use the PRINT statement, and perform mathematical calculations. The last lesson shows examples of the ATARI Personal Computer's color graphics and sound capabilities.
One cassette.

AN INVITATION TO PROGRAMMING 2: WRITING PROGRAMS ONE & TWO (CX4106)

Learn how to write programs in BASIC. These lessons cover library functions, FOR...NEXT loops, subroutines, and READ, DATA, DIMension, PEEK and POKE statements. They also cover flow charting and programming structure. Includes two cassettes and a workbook.

AN INVITATION TO PROGRAMMING 3: SOUND AND GRAPHICS (CX4117)

The Sound cassette includes lessons covering simple music theory and ATARI BASIC commands for setting the sound registers to the desired pitch, purity and loudness levels. Learn to write BASIC programs to play your favorite tune. The Graphics cassette teaches you to use the color registers, the graphics characters ( ), the SETCOLOR and POSITION statements, and graphics modes 0 through 5. Includes two cassettes and a workbook.

ASTROLOGY (CX8111)

What influence do the stars and planets have on your terrestrial affairs? The ATARI Astrology diskette program provides and interprets your solar natal chart and allows you to compare your chart with another person's for compatibility. The computer does all the calculations; all you provide is the date and location of your birth. The latitudes and longitudes of major cities are provided in the manual. Also included on this diskette is an I CHING program that interpets each of its 64 hexagrams. Requires 24K of RAM and the ATARI 810 Disk Drive.

BIORHYTHM (CX4107)

Use this program cassette to calculate physical, emotional and intellectual highs, lows, and critical days. By giving the computer your birthdate you can plot a biorhythm chart on your television screen or optional ATARI Printer. 8K and 16K versions are on alternate sides of the cassette. Requires the ATARI 410 Program Recorder. All ages.

CONVERSATIONAL FRENCH (CX4119), GERMAN (CX4118) AND SPANISH (CX4120)

Have your own language lab at home. See the phrases you need to know when traveling to foreign countries spelled out with descriptive color pictures on the television screen while you listen to the instructor pronounce the phrases correctly. Each language course consists of five cassettes and a workbook, with drills for situations you may encounter on a trip. You may stop the lesson at any point to practice, and continue when you're ready. These programs require the ATARI 410 Program Recorder and 16K of RAM.

MUSIC COMPOSER™ (CXL4007)

Use this cartridge and the computer keyboard to compose songs, recreate old tunes, or experiment. When you program musical notes through the keyboard, you hear the melody as it is simultaneously displayed on the screen. You can change any note or the tempo. And you can arrange the music to play different sections in the order you choose. Once you have entered music, you can save it on the ATARI 410 Program Recorder or an ATARI Disk Drive. You can also write BASIC programs that can convert a melody into melody plus harmony. Operates with minimum 8K RAM system; larger compostions require more RAM.

PERSONAL FITNESS PROGRAM™ (CX4116)

The ATARI Personal Fitness Program provides a daily guide to physical fitness conditioning with record keeping capabilities. An initial question/answer interaction helps to establish where to start and what goals to aim for. It graphs your progress daily and weekly. Typical users might be athletes, business and professional people seeking to retain physical fitness, people dieting to stay slim, or children during their growing years. One cassette. Requires a minimum of 16K RAM and an ATARI 410 Program Recorder.

TOUCH TYPING (CX4110)

Learn to type using your ATARI Personal Computer System. These program cassettes provide step-by-step instructions to familiarize you with the typewriter keyboard while gaining skill and speed. The Touch Typing course is taught in three levels; beginning, intermediate, and advanced. You learn to type a variety of different materials while the computer calculates words-per-minute and number of errors, and determines your weak points. The built-in sentence generator provides drill and practice to strengthen your weak points. This self-paced method of teaching Touch Typing allows you to learn at your own speed. Consists of two cassettes. Requires a minimum of 16K of RAM and the ATARI 410 Program Recorder.

PROFESSIONAL APPLICATIONS

ATARI WORD PROCESSOR (CX404)

Increase your paper productivity with the ATARI Word Processor. Text, reports, documents, letters and memos can be entered, edited, stored and printed. Almost anyone who does a lot of typing will find this program beneficial—teachers, writers, secretaries, entrepeneurs, college students. Two diskettes. Requires ATARI 800 with a minimum of 48K RAM, ATARI 810™ Disk Drive, ATARI 850 Interface Module, and ATARI 825 80-Column Printer.

CALCULATOR (CX8102)

Turn your ATARI Personal Computer into a powerful programmable calculator with 145 functions. Program it yourself using the 3072 byte (3K byte) program memory and 100 memory registers (direct addressing). Algebraic (with or without operator precedence—ALG or ALGN) or Reverse Polish Notation (RPN) may be used. The stack display holds up to 42 characters.

Unlike pocket calculators, the ATARI Calculator program uses the computer keyboard to create a 40 by 24 character display. You see the first ten locations of the stack and memory and the current status of the calculator at a glance. A variety of helpful messages in English such as "ENTER NEW UNITS" tell you what to do next, and error messages such as "ARITHMETIC OVERFLOW" tell you when things go wrong.

Specific Features:

- Numbers-Decimal, Hex, Octal
- Basic Functions-+, -, *, /
- Calculation Modes-ALG, ALGN, RPN
- Single-Variable Functions
- Trigonometric Functions
- Computing Hyperbolic Functions
- Logarithms/Powers of 10 and e
- Two-Variable Functions
- Bit Manipulation Functions
- Memory for data and program storage
- Conversions (examples: teaspoons/cups, grams/ounces, meters/miles, Fahrenheit/Celsius, degrees/radians)
- Polar-Rectangular Conversions
- Statistical Functions (including Linear Regression)
- Compound Interest and Annuities
- Programmable
- Input/Output-Printer, SAVE/LOAD, DOS
- Error Messages/Helpful Prompt Messages

The Calculator program diskette requires a minimum of 24K of RAM and an ATARI 810 Disk Drive. Attach an ATARI Printer and it becomes a printing calculator.

GRAPH IT™ (CX4109)

Create your own bar charts, pie graphs, two and three-dimensional plots and polar plots on your television screen. Use your Joystick Controller to find values of specific points on the two and three-dimensional plots. Requires a minimum of 16K of RAM and the ATARI 410 Program Recorder. Two cassettes.

STATISTICS I (CX4103)

Use Statistics I to determine general statistics from your data, such as mean, mode, median, standard deviation, variance, skewness, kurtosis, and root mean square. ATARI's unique editing capability allows you to replace erroneous data inputs rapidly. This program cassette requires a minimum of 16K of RAM and the ATARI 410 Program Recorder. Adding additional memory allows you to analyze more data values. Printer and disk drive optional.

EDUCATION

ATARI EDUCATIONAL SYSTEM EDUCATIONAL SYSTEM MASTER CARTRIDGE (CXL4001)

Allows the user to use Talk & Teach™ cassette courseware (listed below). Direct interaction with the computer takes place through the keyboard, television screen, and speaker. This running dialogue between the user and the computer is highlighted by immediate feedback on accuracy and understanding. Educational levels are Elementary (E), Secondary (S), Adult/College (A), and Technical (T). Each course consists of 16 lessons on four cassettes. These programs require 8K of RAM and the ATARI 410 Program Recorder.

Model No.	TITLE	Educational Level
CX6017	Basic Algebra	S, A
CX6016	Basic Electricity	A, T
CX6011	Basic Psychology	A
CX6005	Basic Sociology	A
CX6010	Business Communications	A
CX6006	Counseling Procedures	A
CX6012	Effective Writing	A
CX6009	Great Classics	E, S
CX6008	Physics	S, A
CX6007	Principles of Accounting	A
CX6014	Principles of Economics	A
CX6015	Spelling	E, S
CX6003	Supervisory Skills	A
CX6002	U.S. Government	E, S, A
CX6001	U.S. History	E, S, A
CX6004	World History	E, S, A

ENERGY CZAR™ (CX4121)

You are the government official responsible for the United States' energy policy. You must make decisions about such complex problems as which energy sources to use, and whether or not to subsidize or tax energy forms, tighten pollution controls, freeze prices, or ration gas. You must also monitor the country's entire energy usage system, including prices, taxes and environmental effects. The results of your decisions show up in the growth rate of the economy, the inflation rate, and whether or not the public thinks you're doing a good job. This program cassette requires a minimum of 16K of RAM and the ATARI 410 Program Recorder. Age 12 to adult.

HANGMAN (CX4108)

This educational program cassette has 3 levels of play—Beginner, Intermediate and Expert. You play against the computer by guessing the word the computer has selected. If you do not guess the word after six tries the computer will hang your man. You may use the computer keyboard or an optional Joystick Controller to guess the letter. Suitable for ages 8 to adult. This program requires 8K of RAM and the ATARI 410 Program Recorder.

KINGDOM™ (CX4102)

This educational program cassette simulates the running of a small agricultural kingdom. Catastrophe may befall your people, your food supply or your crops. You determine the farming strategy and if you are successful you are allowed to reign another term. Teaches and develops mathematical skills. Age 10 to adult. Requires 8K of RAM and the ATARI 410 Program Recorder.

SCRAM™ (A Nuclear Reactor Simulation) (CX4123)

SCRAM is an educational simulation of a nuclear power plant. Without a technical background, you can learn the fundamentals of its operation and develop a deeper understanding of nuclear safety issues. It also provides a game option that challenges you to apply the principles that you have learned from the simulation. Bad luck increases the probability of earthquakes. Allocate workers to repair damage. Above all, try to avoid a meltdown! Used with a Joystick Controller. 16K and 24K versions are on alternate sides of the cassette. ATARI 410 Program Recorder required. Age 12 to adult.

STATES & CAPITALS (CX4112) AND EUROPEAN COUNTRIES & CAPITALS (CX4114)

These two programs are educational tools designed to teach you the geography of the United States and Europe. Quiz yourself on the names and locations of the states and their capitals, or European countries and their capitals. The computer draws a map and you must identify the state or country outlined. You are then asked to guess the corresponding capital. Be sure to spell correctly. The computer keeps score. Each program consists of one cassette (packaged separately) and requires 16K of RAM and the ATARI 410 Program Recorder. Age 10 to adult.

INFORMATION & COMMUNICATION

Turn your ATARI Personal Computer into a computer terminal! You will need the ATARI 850™ Interface Module, the ATARI 830™ Acoustic Modem and a telephone. This will give you access to data bases and literally thousands of programs. These computer networks provide national and international news, stock market information, financial reports and electronic mail service (communication with other personal computer "terminals").

TELELINK™ I (CXL4015)

This cartridge allows you to access a variety of information utilities. Data transfer takes place through the ATARI 830 Acoustic Modem at the rate of 300 bits per second. TeleLink I supports full and half duplex. Characters are transferred in ASCII. You can keep a hard copy record of your conversation using any one of the ATARI Printers. TeleLink I includes one hour of free time on CompuServe's Information Service, an information utility for personal computer users. Minimum RAM requirement is 8K.

ENTERTAINMENT

The ATARI Personal Computer Systems' exceptional color, high resolution graphics, sound and animation capabilities are used in these entertainment programs, consisting of some of the most popular games in the world. Entertain yourself, your family and friends with these challenging games of strategy and fun.

ASTEROIDS™ (CXL4013)

Asteroids draws you into a science-fiction fantasy like the best selling ATARI arcade game, with several play options. The object is to shoot down asteroids that cross the screen before they crash into your spacecraft. Sound easy? It's not. These "enemy" asteroids become progressively smaller, swifter and more dangerous. And just to keep you honest, flying saucers occasionally veer onto

the screen, emitting shots of their own. Defend your ship with laser bullets. You win points for each hit. You can move your spaceship to any angle continously, firing an unlimited supply of ammunition. "Hyperspace" makes your spacecraft disappear from the screen, out of danger momentarily, but still capable of being hit upon return. One to four players. Cartridge. Not just for kids.

BASKETBALL (CXL4004)

You can dribble, shoot, pass, block shots, and even make steals. Five different game variations allow one, two, three or four players to compete. Play against the computer, your family or friends. This game uses up to four Joystick Controllers (CX40-04). ROM cartridge. Operates with minimum 8K RAM system.

BLACKJACK (CX4105)

Play one of the most popular casino games at home with your ATARI Personal Computer System. The computer is the dealer and it plays by the rules. You, on the other hand, bet money and decide whether to stand, draw another card or double down in your efforts to hit 21. One cassette. Requires ATARI 410 Program Recorder and 8K of RAM.

COMPUTER CHESS (CXL4009)

You can play chess against the computer. Eight levels of play are available. Moves are made using a Joystick Controller. The chess board and pieces are shown on the screen. Both "castling" and "en passant" moves can be made by you or the computer. The board can be set up for a particular chess problem or situation. The computer can play either white or black. Uses one Joystick Controller. ROM cartridge. Operates with minimum 8K RAM system.

MISSILE COMMAND™ (CXL4012)

Defend six major cities from invaders using three missile bases, like the popular ATARI arcade game. Try to destroy incoming nuclear missiles, guard against killer satellites and bombers, and smart missiles that can dodge your fire. After each round of battle with the enemy, your points are tallied based on how many cities you have protected and how many missiles you have remaining. Each missile base has a limited arsenal. You use a Joystick Controller to move the cursor to the selected target area. Your nearest missile base will fire. Each round becomes successively more difficult; the game lasts until all of your cities have been destroyed. Cartridge. One or two players. A game for kids of all ages.

SPACE INVADERS* (CX4111)

You've made a mission to the moon, but so have the deadly SPACE INVADERS*. It's up to you to protect the lunar surface as well as yourself and your laser cannon. The SPACE INVADERS program cassette has 12 different game variations, including some where the enemy shoots diagonally. For one or two players. Uses Joystick Controllers. Requires the ATARI 410 Program Recorder and 8K of RAM.

STAR RAIDERS™ (CXL4011)

A state of war exists between the Atarian Federation and the Zylon Empire. Your mission: Destroy all Zylon star ships. This strategy and action cartridge features four mission skill levels and rates a player at the end of each session. Dramatic sounds and screen displays make this the most exciting space game available today. Your battleground is the entire galaxy. Meteors fly through space; Zylon fleets surround and destroy friendly star bases, and docking at a starbase enables you to receive a new supply of energy and repair damaged equipment. For one player; uses a Joystick Controller. Operates with minimum 8K RAM system.

SUPER BREAKOUT® (CXL4006)

This cartridge is a sophisticated version of the popular electronic video game Breakout, in which you smash through layers of bricks and knock out a wall. Four different games are available, up to eight players can play, and a rating is displayed at the end of each game. You can optionally suspend play or request five additional serves. This cartridge uses up to four Paddle Controllers. Operates with minimum 8K RAM system.

3-D TIC-TAC-TOE (CXL4010)

Now you can play Tic-Tac-Toe from a three-dimensional perspective. This game cartridge program also contains Bottoms-Up, a variation of 3-D Tic-Tac-Toe. Match wits with the computer or compete against another player in either version. One-player games feature eight difficulty levels. Uses Joystick Controllers. Operates with minimum 8K RAM system.

VIDEO EASEL™ (CXL4005)

You can create a design or pattern on the screen using the keyboard or up to four Joystick Controllers, then watch as the computer expands on the original pattern indefinitely. Many variations allow you to create imaginative and colorful graphic designs. Options include Drawing, Quad Drawing, Life (which uses the mathematic principles of John Conway's game of "Life"), resetting the color and six preprogrammed Painting designs. Uses Joystick Controllers. Cartridge. Operates with minimum 8K RAM system.

PROGRAMMING LANGUAGES

ASSEMBLER EDITOR (CXL4003)

Write your own program in assembly language. Perfect your program by single-stepping through it and observing how memory and the processor's registers are affected by each instruction. Store your programs on cassette or diskette and recall them later for editing and execution. Use assembly language when you need fast, efficient code. This cartridge includes an Editor and a Debugger.

BASIC COMPUTING LANGUAGE (CXL4002)

BASIC (which stands for Beginner's All-Purpose Symbolic Instruction Code) is a high-level, easy to learn computing language commonly available on many personal and larger computers. ATARI BASIC is an 8K floating-point BASIC with 9 to 10-digit number precision. The ASIC interpreter includes features that utilize capabilities of the ATARI Personal Computer System, such as access to color and character graphics, sound synthesis and the controller ports (so that you can write your own games). It includes PEEK and POKE instructions, and also gives you the ability to write machine language subroutines. The ATARI peripherals are controllable through BASIC. This cartridge is included with ATARI 400™ and ATARI 800 Personal Computer Systems.

PILOT (CX405)

PILOT (which stands for Programmed Inquiry, Learning, or Teaching) is an easy to learn and easy-to-use programming language. Designed for creating interactive educational programs, PILOT's simple syntax and text orientation make it an ideal language for introducing computer programming to both children and adults (especially teachers); in fact, novice users may write interesting programs after their first or second session. ATARI PILOT also features a powerful set of simple graphics commands for drawing color designs and pictures on the television screen, musical sound generation for up to four simultaneous voices, and commands for accessing files on disk and cassette (including the use of synchronized pre-taped audio for enhancing instructional programs). Cartridge. Ages 8 to adult. ATARI 410 Program Recorder or ATARI 810 Disk Drive optional (recommended for program storage); ATARI Printer optional.

*Trademark of Taito America Corporation.

ATARI® SOFTWARE LIBRARY AND ACCESSORIES

Model No.	Title	Software Medium			Minimum RAM Requirement	R = Required Accessory O = Optional Accessory						
		Cartridge	Diskette	Program Cassette(s)		ATARI 410™ Program Recorder	ATARI Disk Drive	ATARI Printer*	ATARI 830™ Acoustic Modem*	Joystick Controller CX40-04	Paddle Controller CX30-04	Light Pen CX70
CX4101	An Invitation to Programming™ 1[1]			1	8K	R						
CX4106	An Invitation to Programming 2[1, 3]			2	8K	R						
CX4117	An Invitation to Programming 3[1, 3]			2	8K	R						
CXL4003	Assembler Editor	1			8K	O	O	O		O(1-4)	O	O
CXL4013	Asteroids ™ [4]	1			8K					R(1-4)		
CX8111	Astrology[1, 4]		1		24K		R	O				
	ATARI Accountant ™* [4]											
CX402	Accounts Receivable System		4		48K		R	R				
CX401	General Accounting System		4		48K		R	R				
CX403	Inventory Control System		5		48K		R	R				
CX404	ATARI Word Processor [4]		2		48K		R	R				
CX6017	Basic Algebra[2]			4	8K	R						
CXL4002	BASIC Computing Language	1			8K	O	O	O		O(1-4)	O	O
CX6016	Basic Electricity[2]			4	8K	R						
CX6011	Basic Psychology[2]			4	8K	R						
CX6005	Basic Sociology[2]			4	8K	R						
CXL4004	Basketball	1			8K					R(1-4)		
CX4107	Biorhythm[1]			1	8K/16K	R		O				
CX4105	Blackjack[1]			1	8K	R						
CX8106	Bond Analysis[1]		1		24K		R	O				
CX6010	Business Communications[2]			4	8K	R						
CX8102	Calculator		1		24K	O	R	O				
CXL4009	Computer Chess	1			8K					R(1)		
CX4119	Conversational French[1]			5	16K	R						
CX4118	Conversational German[1]			5	16K	R						
CX4120	Conversational Spanish[1]			5	16K	R						

[1] Used in conjunction with the ATARI BASIC Computing Language Cartridge (CXL4002).
[2] Used in conjunction with the Educational System Master Cartridge (CXL4001).
[3] Estimated availability first quarter 1981.
[4] Estimated availability second quarter 1981.

*The ATARI® 850™ Interface Module is required for operation of the ATARI 830 Acoustic Modem, the ATARI 825™ 80-Column Printer and TeleLink™.

NOTE: An 8K ATARI 400™ can be expanded to 16K of RAM at an authorized ATARI Service Center. Programs that require more than 16K of RAM cannot be used with the ATARI 400.

Atari reserves the right to modify programs without notice.
Delivery dates subject to change.

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		Cartridge	Diskette	Program Cassette(s)		ATARI 410™ Program Recorder	ATARI Disk Drive	ATARI Printer*	ATARI 830™ Acoustic Modem*	Joystick Controller CX40-04	Paddle Controller CX30-04	Light Pen CX70
CX6006	Counseling Procedures[2]			4	8K	R						
CXL4001	Educational System Master Cartridge	1			8K	R						
CX6012	Effective Writing[2]			4	8K	R						
CX4121	Energy Czar™ [1]			1	16K	R						
CX4114	European Countries & Capitals[1]			1	16K	R						
CX4109	Graph It™ [1]			2	16K	R				O(1)		
CX6009	Great Classics[2]			4	8K	R						
CX4108	Hangman[1]			1	8K	R				O(1)		
CX4102	Kingdom™[1]			1	8K	R						
CX4104	Mailing List[1]			1	24K	R	O	O				
CXL4012	Missile Command ™ [4]	1			8K					R(1-2)		
CX4115	Mortgage & Loan Analysis[1]			1	16K	R		O				
CXL4007	Music Composer™	1			8K	O	O					
CX406	Personal Financial Management System™ [1,4]		1		32K		R	O				
CX4116	Personal Fitness Program ™ [1, 4]			1	16K	R						
CX6008	Physics[2]			4	8K	R						
CX405	Pilot[4]	1		2	8K	O	O	O		O	O	O
CX6007	Principles of Accounting[2]			4	8K	R						
CX6014	Principles of Economics[2]			4	8K	R						
CX4123	Scram™ (A Nuclear Reactor Simulation)[1,3]			1	16K/24K	R				R(1)		
CX4111	Space Invaders**			1	8K	R				R(1-2)		
CX6015	Spelling[2]			4	8K	R						
CXL4011	Star Raiders™	1			8K					R(1)		
CX4112	States & Capitals[1]			1	24K	R						
CX4103	Statistics I[1]			1	16K	R	O	O				

[1] Used in conjunction with the ATARI BASIC Computing Language Cartridge (CXL4002).
[2] Used in conjunction with the Educational System Master Cartridge (CXL4001).
[3] Estimated availability first quarter 1981.
[4] Estimated availability second quarter 1981.

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CX8107	Stock Analysis[1]		1		24K		R	O				
CX8108	Stock Charting[1]		2		24K		R	O				
CXL4006	Super Breakout®	1			8K					R(1-4)		
CX6003	Supervisory Skills[2]			4	8K	R						
CXL4015	TeleLink™ I	1			8K			O	R			
CXL4010	3-D Tic-Tac-Toe	1			8K					R(1-2)		
CX4110	Touch Typing[1]			2	16K	R						
CX6002	U.S. Government[2]			4	8K	R						
CX6001	U.S. History[2]			4	8K	R						
CXL4005	Video Easel™	1			8K					R(1-4)		
CX6004	World History[2]			4	8K	R						

[1] Used in conjunction with the ATARI BASIC Computing Language Cartridge (CXL4002).
[2] Used in conjunction with the Educational System Master Cartridge (CXL4001).

PERSONAL COMPUTER SYSTEMS
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C016187 REV. 2

CONTROLLERS

ATARI®

The ATARI® Controllers can be used with the ATARI 400™ or the ATARI 800™ Personal Computer System. They can be plugged into any one of the four controller jacks on the front of the computer console. You can write your own programs which use the Joystick (CX40), Paddle (CX30) and Keyboard Controllers (CX50), and the ATARI Light Pen (CX70).

CONTROLLERS

Press the ATARI Light Pen against your television screen and your computer records the position on the screen. Write your own programs. You can paint multi-colored scenes, pick items from a menu, play games or have your computer do geometric calculations for you. Your ATARI Light Pen comes with complete instructions and a demonstration cassette.

Many ATARI programs use the Joystick (CX40) and Paddle (CX30) Controllers. You can also write your own programs which use them or the Keyboard (CX50) Controllers.

LIGHT PEN FEATURES & SPECIFICATIONS

- Use with the ATARI 400™ or ATARI 800™ Personal Computer System.
- Plugs into controller jack.
- Use in all graphics modes.
- Can be used with BASIC, PILOT, assembly language and other ATARI programming languages.
- Paint in up to 5 colors.
- Lightweight.
- Includes demonstration cassette.
- Method of operation: The Light Pen reads the coordinates of the TV electron beam as it passes the Light Pen.
- Resolution: Equivalent to the cursor on the screen (one letter postion).
- Updating: Every frame—60 times a second.
- Light sensitivity: Operates under normal viewing conditions with all home televisions and monitors.
- Switch: Includes tip switch to signal computer when pen is pressed to screen.
- Dimensions: 7"x7/8", 3 oz., 4-ft. cord.

ATARI Personal Computer System programs which use CONTROLLERS

Joystick Controller:

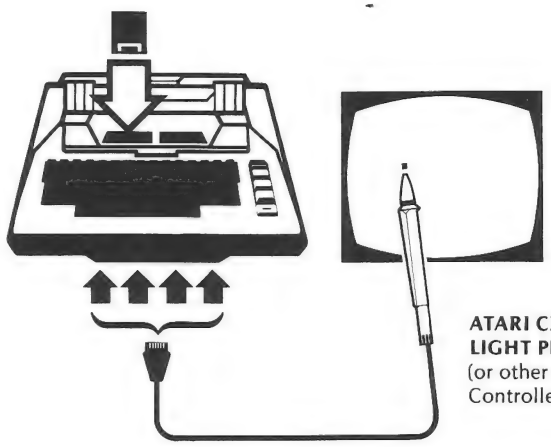
Basketball CXL4004 (1-4)
Computer Chess CXL4009 (1)
Graph It™ CX4109 (one optional)
Hangman CX4108 (one optional)
Space Invaders* (1-2)
Star Raiders™ (1)
Statistics I CX4103 (one optional)
3-D Tic-Tac-Toe (1-2)
Video Easel™ (1-4)

Paddle Controllers:

Super Breakout® CXL4006 (1-4)

Weight: Joystick Controller: 7 oz.
Paddle Controller (pair): 9 oz.

Warranty: 90 days parts and labor.
Service: Available at ATARI authorized service locations.



*Trademark of Taito America Corporation.

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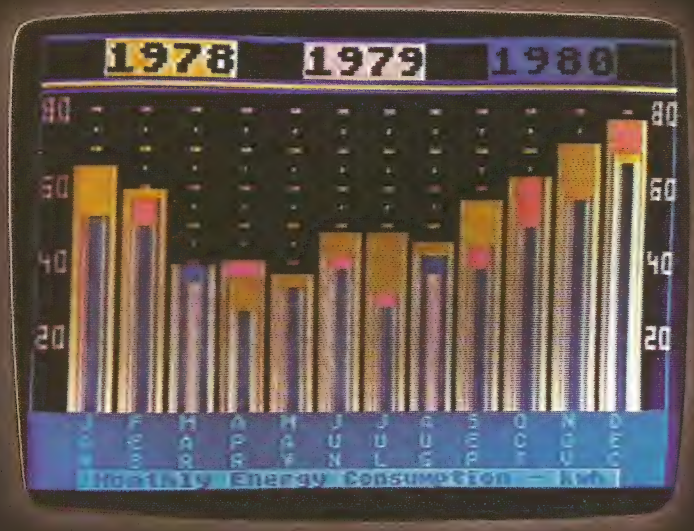
C016846 REV1

800™ PERSONAL COMPUTER

ATARI®



You don't have to be a genius to use one.

The **ATARI 800™** is a top-of-the-line personal computer system. Its expandable memory, advanced peripheral components, comprehensive software library, and modular design assure that it will never become obsolete.

Whether it's for finances or record keeping, professional applications, or personal interest and development, the **ATARI 800** can be tailored to specific needs and has been designed to change as those needs change. This "timeless" computer system can be used by people with no previous computer experience, although it doesn't compromise capability for the sophisticated user.

THE ATARI® 800™ Personal Computer System (with 16K bytes of RAM)

The **ATARI 800 Personal Computer System** can be used in the following applications:

BUSINESS APPLICATIONS

- The ATARI Accountant™[1] has separate packages for General Accounting, Accounts Receivable, and Inventory control.
- ATARI Word Processor[1]

PERSONAL FINANCE AND RECORD KEEPING

- Personal Financial Management System™ [1]
- Investment Analysis Series
  - Bond Analysis[1]
  - Mortgage & Loan Analysis
  - Stock Analysis[1]
  - Stock Charting[1]
- Mailing List[1]

PERSONAL INTEREST AND DEVELOPMENT

- **ATARI'S INVITATION TO PROGRAMMING™** series teaches fundamentals of BASIC programming.
- **ASTROLOGY**[1]
- **BIORHYTHM**
- **CONVERSATIONAL FRENCH, GERMAN AND SPANISH**
- **MUSIC COMPOSER™**
- **TOUCH TYPING**
- **PERSONAL FITNESS PROGRAM™**

PROFESSIONAL APPLICATIONS

- **CALCULATOR**[1]
- **GRAPH IT™**
- **STATISTICS I**
- **ATARI WORD PROCESSOR**[1]

EDUCATIONAL APPLICATIONS

The exclusive **ATARI Talk & Teach™ Library** on audio/digital cassettes, contains 16 subjects:

- Accounting
- Algebra
- Business Communications
- Counseling Procedures
- Economics
- Effective Writing
- Electricity
- Great Classics
- Physics
- Psychology
- Sociology
- Spelling
- Supervisory Skills
- U.S. Government
- U.S. History
- World History

Direct interaction with the computer takes place through the keyboard, television screen, and speaker. This running dialogue between the user and the computer is highlighted by immediate feedback on accuracy and understanding.

Educational games make learning fun:

- Energy Czar™
- Hangman
- Kingdom™
- States & Capitals
- European Countries & Capitals
- Scram™ (A Nuclear Reactor Simulation)

INFORMATION AND COMMUNICATION

- **TeleLink™** allows access to on-line computing services and data bases through your telephone (requires ATARI 850™ Interface Module and ATARI 830™ Acoustic Modem).

SYSTEM SOFTWARE

- Disk operating systems.

ENTERTAINMENT

- Basketball
- Blackjack
- Computer Chess
- Space Invaders*
- Star Raiders™
- Super Breakout®
- 3-D Tic-Tac-Toe
- Video Easel™
- Missile Command™
- Asteroids™

PROGRAMMING LANGUAGES

- BASIC
- EXTENDED BASIC
- ASSEMBLY LANGUAGE
- PILOT
- PASCAL

FEATURES & SPECIFICATIONS

Console: FCC approved, with built-in RF modulator. Connects to any TV (U.S.A.).
CPU: 6502 Microprocessor. 0.56 microsecond cycle. 1.8 MHz.
Color: 16 colors, each with 8 intensities.
Sound: Four independent sound synthesizers (in addition to audio through TV) for musical tones or game sounds. Four octaves. Variable volume and tone. Internal speaker.
Memory: 16K bytes of Random Access Memory is included. The ATARI 800™ may be expanded up to 48K RAM with user-installed 8K or 16K ATARI Memory Modules™. The system includes a 10K ROM Operating System. ROM may be expanded with user-installed cartridge programs.
Keyboard: 57 full-stroke alphanumeric keys plus 4 function keys. Upper/lower case. Inverse video. Full screen editing. Four-way cursor control. 29 graphics keys.
I/O: Serial input/output port for simple connection to peripherals. Four controller jacks.
Language: ATARI BASIC cartridge is included.
Display: Highest graphics resolution 320 x 192. 24 lines of 40 characters. Three text modes.
Power: AC transformer, UL approved, included. 120 VAC.
Dimensions: 16″x12½″x4½″. 9¾ lbs.
Warranty: 90 days parts and labor.
Service: Available at ATARI authorized service locations.

PERIPHERALS & ACCESSORIES

ATARI 410™ PROGRAM RECORDER
ATARI 810™ DISK DRIVE[1]
ATARI 815™ DUAL DISK DRIVE (DOUBLE DENSITY)[1]
ATARI 820™ 40-COLUMN DOT MATRIX IMPACT PRINTER
ATARI 822™ 40-COLUMN THERMAL PRINTER
ATARI 825™ 80-COLUMN DOT MATRIX IMPACT PRINTER
ATARI 830™ ACOUSTIC MODEM
ATARI 850™ INTERFACE MODULE
ATARI PADDLE (CX 30), JOYSTICK (CX 40) AND KEYBOARD (CX 50) CONTROLLERS and LIGHT PEN (CX 70)
8K RAM MEMORY MODULE™ (CX 852)
16K RAM MEMORY MODULE (CX 853)
ATARI COLOR (CX 89) AND B & W (CX 82) MONITOR CABLES

ADDITIONAL ATARI 800 FEATURES

RAM Memory: Expandable to 48K bytes with user-installed RAM Memory Modules™.
Keyboard: 57 full-stroke keys plus 4 function keys.
Monitor Jack: Composite video output for connection to a monitor.

ATARI BASIC language cartridge is included.

[1]Requires more than 16K RAM *Trademark of Taito America Corporation.

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C015702 REV4

ATARI® 400™ PERSONAL COMPUTER

NEW! Now available in **8K** and **16K** versions.

You don't have to be a genius to use one.

It doesn't take a computer background to learn how to use the **ATARI 400™.** This "general purpose" personal computer can be used for:

- Business and Household Management
- Educational Applications
- Entertainment

It's affordable and it's easy to use. The **ATARI 400** will bring creative and exciting uses ranging from music, art, education, and extraordinary entertainment to the entire family.

THE ATARI® 400™ Personal Computer System

The **ATARI 400 Personal Computer System** can be used in the following applications:

EDUCATIONAL APPLICATIONS

The exclusive ATARI Talk & Teach™ Educational Library of cassette courseware contains 16 subjects:

- Accounting
- Algebra
- Business Communications
- Counseling Procedures
- Economics
- Effective Writing
- Electricity
- Great Classics
- Physics
- Psychology
- Sociology
- Spelling
- Supervisory Skills
- U.S. Government
- U.S. History
- World History

Direct interaction with the computer takes place through the keyboard, television screen, and speaker. This running dialogue between the user and the computer is highlighted by immediate feedback on accuracy and understanding.

Programs like Hangman, Kingdom™, Energy Czar™[1], States & Capitals[1] and European Countries & Capitals[1] make learning fun.

INFORMATION AND COMMUNICATION

- **TeleLink™** allows access to on-line computing services and data bases through your telephone (requires ATARI 850™ Interface Module and ATARI 830™ Acoustic Modem).

ENTERTAINMENT

The **ATARI 400** features the most exciting and sophisticated games made possible only by "state of the art" electronic design including superior color graphics, advanced sound synthesis circuitry, fine resolution, and high reliability.

- Computer Chess
- Basketball
- Star Raiders™
- Video Easel™
- Missile Command™
- Super Breakout®
- 3-D Tic-Tac-Toe
- Space Invaders*
- Blackjack
- Asteroids™

PERSONAL INTEREST AND DEVELOPMENT APPLICATIONS

- ATARI's **Invitation to Programming™** series teaches the fundamentals of BASIC programming.
- **Conversational French, German and Spanish[1]**
- **Music Composer™**
- **Biorhythm**
- **Touch Typing[1]**
- **Personal Fitness Program™ [1]**

PROFESSIONAL APPLICATIONS

- **Graph It™[1]**
- **Statistics I[1]**

PERSONAL FINANCE

- **Mortgage & Loan Analysis[1]**

PROGRAMMING LANGUAGES

- BASIC
- ASSEMBLY LANGUAGE
- PILOT

FEATURES & SPECIFICATIONS

Console: FCC approved with built-in RF modulator. Connects to any TV (U.S.A.).
CPU: 6502 Microprocessor: 0.56 microsecond cycle. 1.8 MHz.
Color: 16 colors; each with 8 intensities.
Sound: Four independent sound synthesizers for musical tones or game sounds. Four octaves. Variable volume and tone. Internal speaker (in addition to audio through TV).
Memory: Two versions—8K or 16K bytes of Random Access Memory (RAM) included. The 8K version may be expanded to 16K RAM at an authorized ATARI service center. Both versions include a 10K ROM Operating System. ROM may be expanded with a user-installed cartridge program.
Keyboard: 57 key monopanel alphanumeric keyboard plus 4 function keys. Upper/lower case. Inverse video. Full screen editing. Four-way cursor control. 29 graphics keys.
I/O: Serial input/output port for simple connection to peripherals. Four controller jacks.
Language: ATARI BASIC cartridge is included.
Display: Highest graphics resolution 160 x 96 (320 x 192[1]). 24 lines of 40 characters. Three text modes.
Power: AC transformer, UL approved, included. 120 VAC.
Dimensions: 13½" x 11½" x 4½", 5¾ lbs.
Warranty: 90 days parts and labor.
Service: Available at ATARI authorized service locations.

PERIPHERALS & ACCESSORIES

ATARI 410™ PROGRAM RECORDER
ATARI 810™ DISK DRIVE[1]
ATARI 815™ DUAL DISK DRIVE (DOUBLE DENSITY)[1]
ATARI 820™ 40-COLUMN DOT MATRIX IMPACT PRINTER
ATARI 822™ 40-COLUMN THERMAL PRINTER
ATARI 825™ 80-COLUMN DOT MATRIX IMPACT PRINTER
ATARI 830™ ACOUSTIC MODEM
ATARI 850™ INTERFACE MODULE
ATARI PADDLE (CX 30), JOYSTICK (CX 40) AND KEYBOARD (CX 50) CONTROLLERS and LIGHT PEN (CX 70)

[1]Requires 16K RAM.
*Trademark of Taito America Corporation.

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410™ PROGRAM RECORDER

ATARI®

The **ATARI® 410™ Program Recorder** provides users of **ATARI Personal Computers** with a method of storing programs and data in computer readable form. In addition to a digital track, an audio track can be recorded on the cassettes. This capability allows the user to both run programs and listen to voice or music through the television speaker.

This feature is used by the **ATARI Talk & Teach™** educational courseware cassettes, and by **An Invitation to Programming©℗** series, which covers the fundamentals of **BASIC** programming (used with the **BASIC Computing Language** Cartridge, model no. CXL 4002).

THE ATARI® 410™ Program Recorder

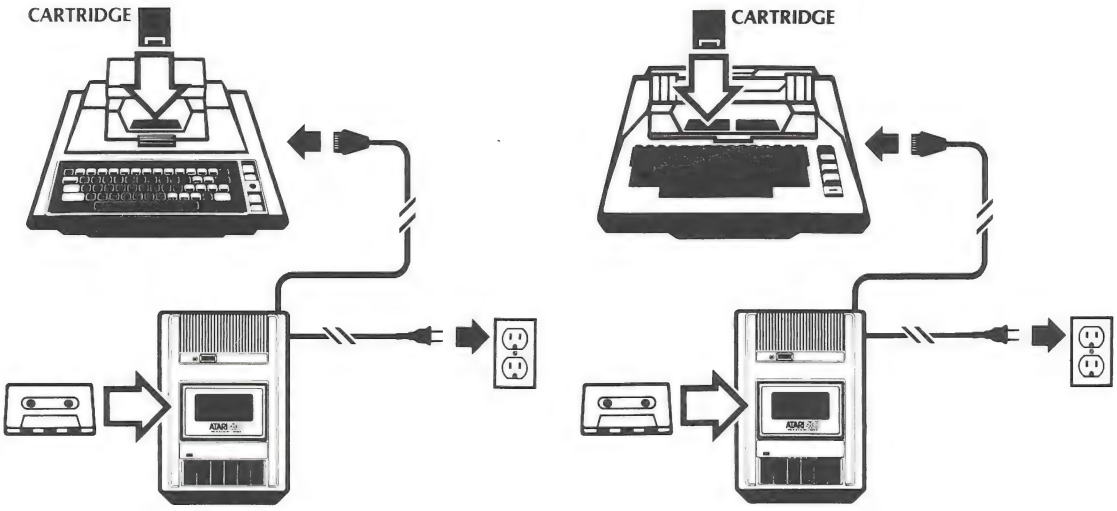
The **ATARI 410 Program Recorder** resembles an ordinary cassette tape recorder, except that its playback and recording volume levels have been permanently set at the correct volume level for use with the **ATARI Personal Computer Systems.** It can read a prerecorded audio track in addition to a digital track. The ATARI Talk & Teach™ Educational Library, ATARI'S Invitation to Programming™ series, Conversational French, German and Spanish, and other ATARI programs use this exclusive feature. Any high quality, blank audio cassette tape may be used to store the user's own programs or data. The user can load and save programs which are written using the ATARI programming languages; save and retrieve data files; and save musical scores (in digital form) which are written using the Music Composer™ Cartridge (model no. CXL 4007).

The **Program Recorder** can be turned on and off under program control. Up to 102,400 bytes can be stored on a 60-minute cassette.

Two styles of the ATARI 410 Program Recorder are currently manufactured, with equivalent performance.

FEATURES & SPECIFICATIONS

- Direct serial interface to ATARI Personal Computer Systems.
- Automatic motor control.
- 2 Channel (digital data and audio track).
- 3 Digit tape counter.
- Pushbutton controls for RECORD, REWIND, PLAY, ADVANCE and STOP/EJECT.
- Audio track plays through television speaker.
- Data transmission rate: 600 bits per second.
- Cassettes play on both sides.
- 100,000 bytes of data storage per 60-minute cassette.
- Built-in accidental erasure prevention device.
- Preset volume level.
- Power: Built-in power supply, UL approved. 120 VAC.
- Dimensions: 9½"x6⅜"x2¾", 44 oz.
- Warranty: 90 days parts and labor.
- Service: Available at ATARI authorized service locations.



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810™ DISK DRIVE

ATARI®

The **ATARI® 810™ Disk Drive** can be used with many ATARI Personal Computer System peripherals. A minimum 16K of RAM is required in your ATARI Personal Computer System to operate the **ATARI 810 Disk Drive**. Included with the **ATARI 810 Disk Drive** is the ATARI DOS/FMS (Disk Operating System/File Management System) master diskette, power adaptor, and full operating instructions...all you need to get your **ATARI 810 Disk Drive** System operating. The ATARI Personal Computer System will control up to four **ATARI 810 Disk Drives**, giving your system over 368,000 bytes (some of which are used for system software), or over 92K bytes per Disk Drive.

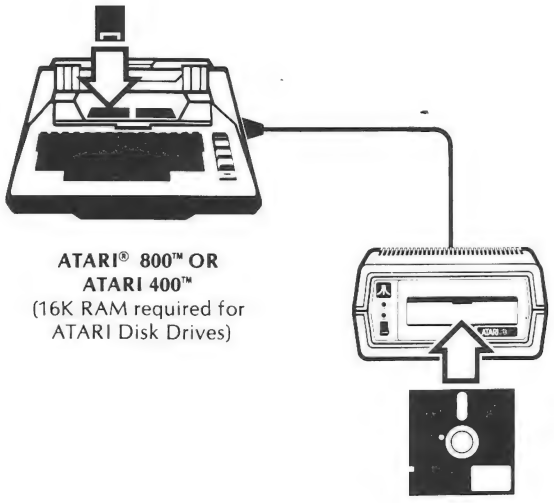
THE ATARI® 810™ Disk Drive

FEATURES & SPECIFICATIONS

- Direct serial interface to ATARI Personal Computer Systems.
- Uses standard 5¼-inch soft-sectored diskettes.
- Stores 88K bytes of data on each diskette.
- Up to four **ATARI 810 Disk Drives** can be attached to your ATARI Personal Computer System (minimum 16K RAM required).
- Power on/off switch.
- "Disk busy" indicator light.
- Built-in 6507 microprocessor and on-board ROM give automatic stand-by capability.
- Average access time: 74 milliseconds.
- Maximum access time: 236 milliseconds.
- Individual device-address when more than one **ATARI 810 Disk Drive** is used.
- Average data transfer rate: 6000 bits per second.
- Data transfer rate: 19.2K bits per second.
- Uses Cyclic Redundancy Check (CRC) to check for errors.
- Error recovery rate (soft errors): 1 per 100,000,000 bits read.
- Mean time between failures: 8,000 power-on hours.
- Each diskette is divided into 720 sectors, 13 of which are used for software control.
- The ATARI 810 Disk Drive Stores 128 bytes of data in each sector (3 bytes are used to address the next sector.)
- 88,375 bytes per diskette are available for programs and data.
- Media life: 3,000,000 passes on a single track.
- Power: AC transformer, UL approved, included. 120 VAC.
- Dimensions: 12"x9½"x4⅝", 104 oz.
- Warranty: 90 days parts and labor.
- Service: Available at ATARI authorized service locations.

ACCESSORIES

ATARI Blank Diskettes CX 8100 (5 per box)
ATARI 810 Master Diskette CX 8101
ATARI 810 Master Diskette II CX 8104 (included)
ATARI 810 Formatted Diskettes II CX 8111 (5 per box, one included)



ATARI® 800™ OR ATARI 400™
(16K RAM required for ATARI Disk Drives)

ATARI 810™ DISK DRIVE

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815™ DUAL DISK DRIVE

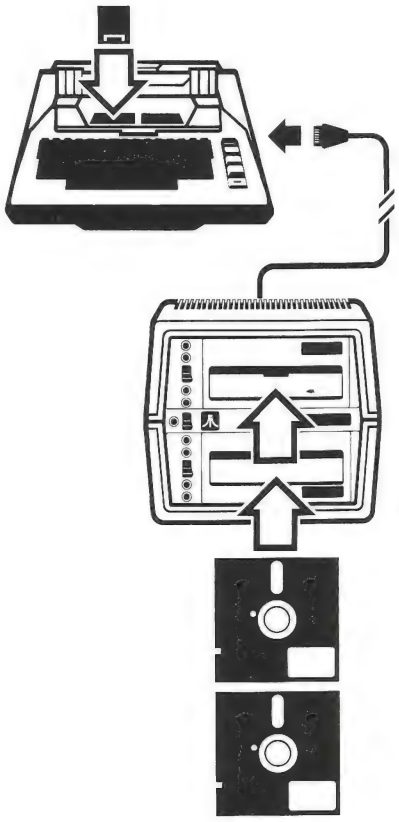
ATARI®

The **ATARI® 815™** is a double density, single-sided Dual Disk Drive that consists of two 5¼" disk drives and a microprocessor for control. The system records with double density Modified Frequency Modulation (MFM) in 256-byte block intervals. A minimum of 16K of RAM is required in your **ATARI Personal Computer System** to operate the **ATARI 815 Dual Disk Drive.** Included with the **ATARI 815 Dual Disk Drive** is the ATARI DOS/FMS (Double Density Disk Operating System/File Management System) diskette and full operating instructions. The **ATARI Personal Computer System** will control up to four double density, single-sided dual disk drives.

THE ATARI® 815™ Dual Disk Drive (Double Density, Single-sided)

FEATURES & SPECIFICATIONS

- Direct serial interface to ATARI Personal Computer Systems.
- Uses standard 5¼-inch soft-sectored diskettes which are certified for double density use.
- Stores 178K bytes of data on each diskette.
- Up to four ATARI 815 Dual Disk Drives can be attached to your ATARI Personal Computer System (minimum 16K of RAM required).
- Individual device addresses for each drive unit.
- Power on/off switch and light.
- "Disk busy" indicator light for each drive.
- "Read" indicator light for each drive.
- "Write" indicator light for each drive.
- "Write Protect" indicator light for each drive.
- "Write Protect" switch for each drive.
- Uses Cyclic Redundancy Check (CRC) to check for errors.
- Error recovery rate (soft errors): 1 per 100,000,000 bits read.
- Mean time between failures: 8,000 power-on hours.
- Each diskette is divided into 720 sectors, 13 of which are used for software control.
- The ATARI 815 Dual Disk Drive stores 256 bytes of data in each sector (3 bytes are used to address the next sector).
- 178, 871 bytes per diskette are available for programs and data.
- Average access time for each diskette: 70 msec.
- Maximum access time: 210 msec.
- Media life: 3,000,000 passes on a single track.
- Built-in 6507 microprocessor and on-board ROM serve as disk controller and interface to computer console.
- Formats diskettes.
- Power: Built-in power supply, UL approved; 120 VAC.
- Dimensions: 12"x9½"x8⅜", 200 oz.
- Warranty: 90 days parts and labor.
- Service: Available at ATARI authorized service locations.



ATARI® 800™ OR ATARI 400™
(16K RAM required for ATARI Disk Drives)

ATARI 815™ DUAL DISK DRIVE

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C016184 REV2

820™ 40-COLUMN PRINTER

ATARI®

The **ATARI® 820™ Printer** generates a hardcopy printout of computer data and program material for the **ATARI Personal Computer Systems**. It is a 40 column, dot matrix impact printer which prints upper and lower case characters at a rate of 40 per second.

Many combinations of hardware and software make use of the Printer. Application programs provide an option to print out results whenever appropriate. The **BASIC** and **ASSEMBLER EDITOR** Cartridges include **ATARI 820 Printer** commands, as does the **ATARI Disk Operating System (DOS)** and **File Manager System (FMS).**

THE ATARI® 820™ Printer (40-column impact printer)

Each piece of software, whether cartridge, cassette, or diskette based, will have its own commands for activating the **ATARI 820™ Printer.** Users simply consult the software manual which accompanies the software they wish to use with the Printer for complete Printer commands.

FEATURES & SPECIFICATIONS

- Direct serial interface to ATARI Personal Computer System.
- High resolution, 5 x 7 dot matrix, impact printer.
- 40 characters per line, upper & lower case alpha.
- Horizontal and vertical alphanumeric characters.
- Power switch and indicator light.
- Paper advance button.
- Built-in 6507 microprocessor, 6532 RAM I/O chip and 2K of on-board ROM.
- Crystal controlled for data accuracy.
- Printing Speed, 40 characters per second.
- Power: Built-in power supply, UL approved. 120 VAC.
- Dimensions: 12"x9½"x5½", 168 oz. (including paper).
- Warranty: 90 days parts and labor.
- Service: Available at ATARI authorized service locations.

ACCESSORIES

Standard Roll Paper (one roll included)
- Width, 3⅞ inches x 3¼ inches diameter available at most stationery stores
- **ATARI** part no. C014062

Ribbon (included)
- **ATARI** part no. C014854
- Addressograph/Multigraph part no. 116-2395-366

Data Cord
- **ATARI** part no. CA14122 included (3 ft.)
- **ATARI** part no. CX81 (5 ft.)

SAMPLE PRINTOUT

```
A B C D E F G H I J K L M N O P Q R S T
U V W X Y Z a b c d e f g h i j k l m n
o p q r s t u v w x y z 0 1 2 3 4 5 6 7
8 9 ! " # $ % & ' @ ( ) < > - = _ | + *
\ ^ ; : , . [ ] / ? { ` } ~
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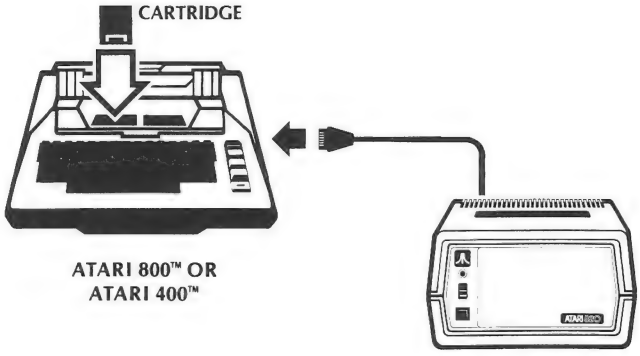

ATARI 800™ OR ATARI 400™

ATARI 820™ PRINTER

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C015707 REV3

822™ THERMAL PRINTER

ATARI®

The **ATARI® 822™ Thermal Printer** generates hardcopy printout of computer programs and data for the **ATARI Personal Computer Systems**. It is compact and lightweight and may be used with many combinations of hardware and software.

THE ATARI® 822™ THERMAL PRINTER (40-column)

The **ATARI 822 Thermal Printer** is an intelligent microprocessor-based dot matrix printer. It features bidirectional look-ahead printing (prints right to left as well as left to right). This high performance serial printer provides a full 96 character ASCII set, 10 characters per inch, and full line buffering.

The **ATARI 822 Thermal Printer** is highly reliable because of its mechanical simplicity. Installation is quick and easy with direct connection to the computer console or other optional peripherals. The I/O Data Cord and AC Power Adapter are included with the **ATARI 822 Thermal Printer.**

The 822 Thermal Printer is packaged with one roll of white thermal paper installed. Additional rolls may be purchased in two-roll packs through your ATARI dealer (Part no. C015995). Thermal paper is heat sensitive, and care should be taken to store it in a cool, dry place.

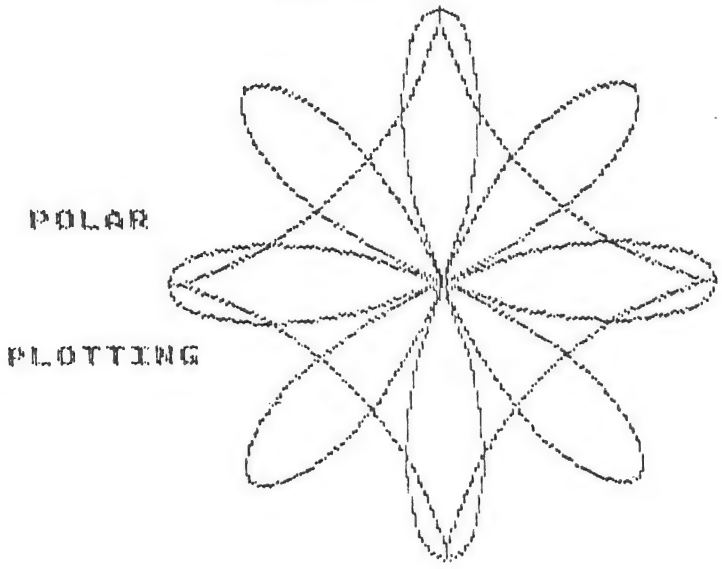
FEATURES & SPECIFICATIONS

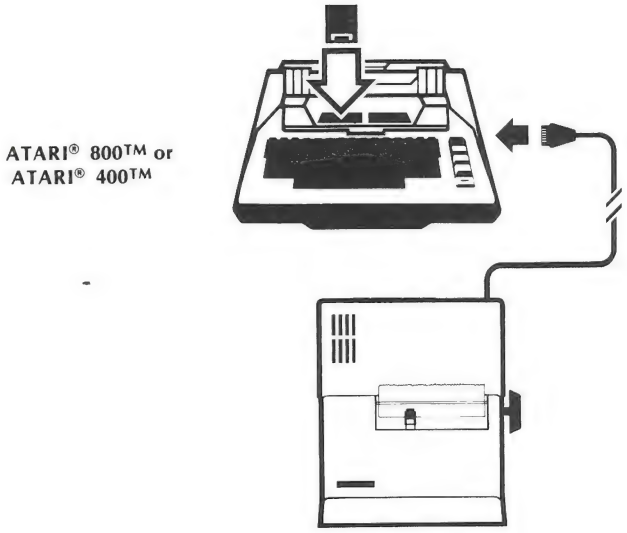
- 37 characters per second.
- 10 characters per inch.
- 40 characters per line, upper/lower case and point graphics.
- 5 x 7 dot matrix.
- Full line buffering.
- Bidirectional look-ahead print head.
- Direct serial interface to ATARI Personal Computer Systems.
- Power: AC transformer, UL approved, included. 120 VAC.
- Dimensions: 9½"x7½"x2¾". • Weight: less than 6 pounds.
- Warranty: 90 days parts and labor.
- Service: Available at ATARI authorized service locations.

SAMPLE PRINTOUT

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
-=;+*,./_|^\:[]?
0123456789
!#$%&'()<>
```

SAMPLE PLOT





ATARI 822
THERMAL PRINTER

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C016183 REV2

825™ 80-COLUMN PRINTER

ATARI®

The **ATARI® 825™ Printer** is a versatile dot matrix impact printer that can handle almost any printing task. It can print lines up to 8 inches long in four different character modes: monospaced (uniformly spaced) characters at a density of 10 characters per inch, condensed characters at 16.7 characters per inch, proportionally spaced characters, and double-width characters. It can be set to justify the right margin, execute forward or reverse line feeds, half space, and underline. All character modes and functions are set by control codes from the computer.

In addition, this printer can handle three kinds of paper: roll paper, computer-grade fanfold (including three-part forms), and single sheets.

The **ATARI 825 Printer** connects easily to the **ATARI® 850™ Interface Module**, which is required for operation of the Printer.

THE ATARI® 825™ Printer

The flexibility of the **ATARI 825 Printer** enables users to perform a variety of functions with only one output device, including:

- Payroll checks on preprinted continuous forms.
- Inventory listings on fanfold paper.
- Direct mail on cut sheets.
- General information on inexpensive roll paper.

The **ATARI 825 Printer** is lightweight and compact. It weighs only 12 pounds, and is no larger than a portable typewriter. The adjustable print head feature allows compensation for differing thicknesses of paper.

FEATURES

- Microprocessor electronics
- Prints three character sets;
  monospaced 7x8 dot matrix characters at 10 characters per inch (cpi); monospaced condensed at 16.7 cpi; proportionally spaced Nx9 dot matrix characters at avg. of 14 cpi (N=6,7,8...,18 dot column variable.)
- Each character set with 96 standard ASCII characters.
- All characters can be elongated (printed double width).
- Character density: 10 or 16.7 characters per inch (cpi) monospaced; approx. 14 cpi proportionally spaced; half as many if elongated.
- No. characters per line: 80 at 10 cpi; 132 at 16.7 cpi.
- Printer speed:
  Characters per sec (cps): 50 cps with 10-cpi monospaced; 83 cps with 16.7-cpi condensed; 79 cps (avg.) with proportionally spaced.
  Lines per min. (lpm): 22 lpm with 80 columns; 60 lpm with 20 columns.
- Unidirectional printing at 5 inches per second.
- Carriage return speed upward of 5 inches per second.
- Print buffer capacity: 80 char. at 10-cpi monospaced; 132 char. at 16.7-cpi condensed; 1200 dot columns.
- Vertical line feed: 6 lines per inch.
- Forward and reverse line feed.
- Full and half line spacing.
- Right margin justification capability with condensed or proportionally spaced characters.
- Underscoring and backspacing capabilities.
- Three-way paper handling: roll, fanfold, cut sheets.
- Ribbon system: continuous ribbon 9/16-inch (14mm) wide, 20 yards (18.3 meters) long. Mobius loop allows printing on upper and lower portion of ribbon on alternate passes.
- Ribbon, built in power supply, interface cable, and operator's manual are all included.

OPTIONAL ACCESSORIES

- Ribbon replacement, CX825 (3 per box)
- ATARI 825 Printer Paper (C016233)
- Printer cable, CX86 (included)

SPECIFICATIONS

Operator controls:
POWER ON/OFF switch
ON-LINE/LOCAL switch
PAPER REV/FWD switch (Local Mode)

Data Input: 7-bit parallel ASCII-coded data

Dimensions:
Width: 14.5 inches/37 cm.
Depth: 11.0 inches/28 cm.
Height: 5.0 inches/13 cm.
Dimensions exclusive of roll paper holder
Weight: 12 lbs./5.4 kg.

Power: Built-in power supply, UL approved, included. 120 VAC

Temperature/Humidity:
Operating: 40°F-100°F (4.4°C-37.7°C)
20%-90% RH, no condensation
Storage: -35°F-140°F (-37.2°C-60°C)
5%-95% RH, no condensation

Warranty: 90 days parts and labor

Service: Available at ATARI authorized service locations.

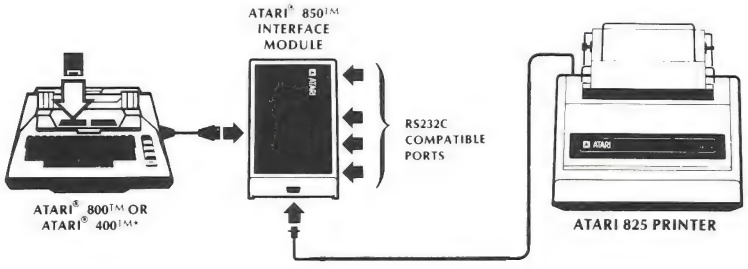
FORMS HANDLING

Roll Paper: 8.5"x 5.0" diameter with 1 inch maximum core dimension.
3.5" wide with .38" minimum core dimension.
(Standard teletype paper rolls may be used.)

Fanfold: 9.0"/22.9 cm wide pin to pin.
9.5"/24.1 cm wide overall.
- Up to 3 ply with 2 carbons (total thickness not to exceed .012").

Cut Sheets: 8.5" maximum width.

NOTE: The **ATARI 825 Printer** must be used in conjunction with the ATARI 850™ **Interface Module.** Paper is not included.



SAMPLE PRINTOUT

```
 !"#$%&'()*+,-./0123456789:;<=>?
@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
`abcdefghijklmnopqrstuvwxyz{|}~
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C015708 REV3

830™ ACOUSTIC MODEM

ATARI®

The **ATARI® Modem** enables the user of an ATARI Personal Computer System to set up communications over standard telephone lines. It is a stand-alone, acoustically coupled frequency shift keying (FSK) modem. Used with the ATARI 850™ Interface Module, it can send and receive at up to 300-baud. The **ATARI 830 Modem** is fully compatible with the Bell 103/113 series of modems. This allows access to data bases for weather, transportation schedules, entertainment events, stock quotes, news releases, electronic mail and communications with other types of computers and computer peripherals, including time share services.

THE ATARI® 830™ Acoustic Modem

The **ATARI 830 Modem** is a stand-alone, acoustically coupled, frequency shift keying (FSK) modem. When used with the ATARI 850™ Interface Module, the **ATARI 830 Modem** will allow communications by ATARI 400™ or ATARI 800™ Personal Computer Systems over standard telephone lines.

"Modem" stands for "modulator-demodulator". The modulator converts the data you input on your ATARI Personal Computer System into signals that can be sent over the telephone lines. The demodulator converts the signal back into data that can be read by the ATARI Personal Computer.

Communication speed is measured by a unit called bits per second (bps). The **ATARI 830 Modem** operates at rates up to 300 bps. Since one character (letter, digit, etc.) is represented by 10 bits, the **ATARI 830 Modem** can communicate up to 30 characters per second.

Because the **ATARI 830 Modem** can operate in either "originate" or "answer" mode, communications are possible with both originate-only or answer-only modems. The **ATARI 830 Modem** can also be switched from half-duplex to full-duplex operation. A special test mode to verify that the **ATARI 830 Modem** is operational is included.

The **ATARI 830 Modem** is powered by a UL-listed low voltage wall plug-in AC power supply (included), which eliminates dangerous high voltages within the unit.

The universal standard for communications between computers and computer-related equipment is the EIA-RS232C standard. The **ATARI 830 Modem** has an EIA-RS232C interface, and is fully compatible with the Bell 103/113 series of modems, the most widely available kind of modem in the world. This compatibility allows your ATARI 400 or ATARI 800 Personal Computer System to "talk", not only with other ATARI 400 or ATARI 800 Computer Systems, but other types of computer systems and computer-related equipment as well, such as time-share systems, wire services, teletype, etc.

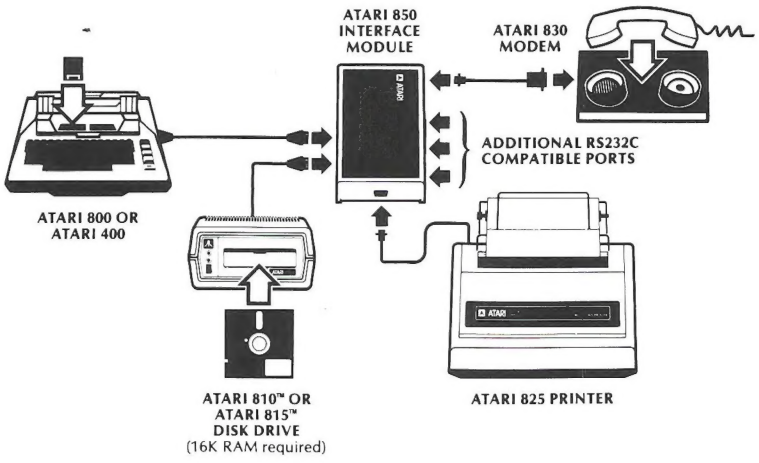
SPECIFICATIONS:

- CONTROLS
  - FULL: sets full-duplex operation
  - TEST: sets up audio self-test
  - HALF: sets up half-duplex operation
  - ANS: sets answer mode
  - OFF: turns **ATARI 830 Modem** power off
  - ORIG: sets originate mode
- TRANSMITTER FREQUENCIES
  - Originate: mark, 1270-Hz; space, 1070-KHz
  - Answer: mark, 2225-Hz; space, 2025-Hz
- RECEIVE FREQUENCIES
  - Originate: mark, 2225-Hz; space, 2025-Hz
  - Answer: mark, 1270-Hz; space, 1070-Hz
- RECEIVE SENSITIVITY: -50dBm
- INDICATORS
  - POWER: LED shows power ON/OFF
  - READY: LED shows ready to communicate
- POWER: UL approved power adaptor included. 120 VAC.
- ELECTRICAL REQUIREMENTS
  - UL-listed wall mount transformer on a six foot cord (included). • Interface/Modem cable (part no. CX87) included. This cable connects the **ATARI 830 Acoustic Modem** to the ATARI 850™ Interface Module.
- DIMENSIONS: 10.2"x 4.7"x 2.3", weight: 1.5 pounds
- OPERATIONAL ENVIRONMENT
  - 32 to 122 degrees (F) or 0 to 50 degrees (C) in 10 to 90 percent relative humidity.
- STORAGE ENVIRONMENT
  - -40 to 140 degrees (F) or -40 to 60 degrees (C) in 10 to 90 percent relative humidity.
- WARRANTY: 90 days parts and labor.
- SERVICE: Available at ATARI authorized service locations.

ACCESSORIES

ATARI TeleLink™ I cartridge, CXL4015
Modem Power Supply, CA016751-01 (included)
Interface/Modem Cable, CX87 (included)

For use with the ATARI 400 or ATARI 800 Personal Computer Systems, the user must connect the ATARI 830 Modem through the ATARI 850 Interface Module (sold separately). The ATARI 850 Interface Module has fou EIA RS232C compatible ports, I/O port for connection to the ATARI Personal Computer System, and a parallel port for connection to the ATARI 825™ Printer.



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850™ INTERFACE MODULE

ATARI®

The **ATARI® 850™ Interface Module** has four EIA RS232C-compatible ports (one for ATARI 830™ Acoustic Modem), an 8-bit parallel output interface port for connection to the ATARI 825™ Printer, and an I/O port for connection the ATARI Personal Computer Systems. This allows almost limitless expansion of the ATARI Personal Computer System. You can add a digitizer, a plotter, sensors, controllers...almost any computer peripheral that is RS232C-compatible.

THE ATARI® 850™ Interface Module

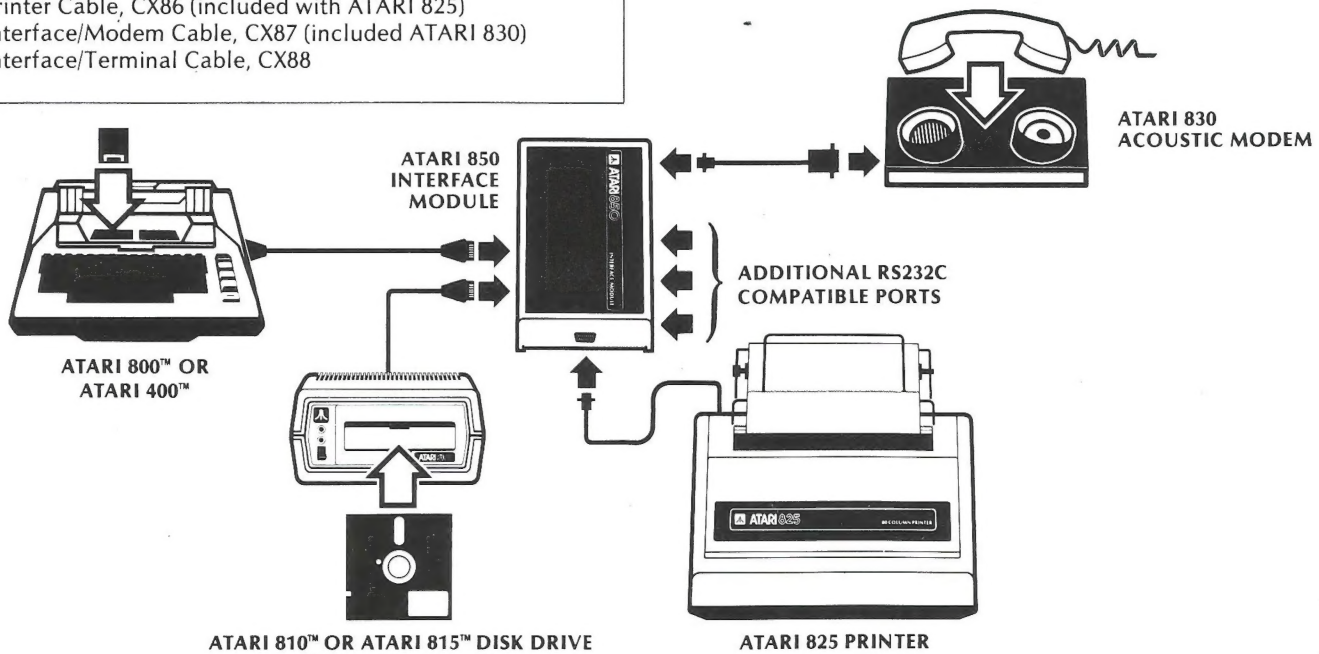
The **ATARI 850 Interface Module** has programmable baud rate on any RS-232C port of up to 9600 bits-per-second. Complete programming instructions are included. This peripheral expands the ATARI 400/800™ input/output interface capability by permitting access to a larger family of peripheral devices (any RS232C-compatible, Centronics type 8-bit parallel, or 20-mA current loop peripherals).

FEATURES & SPECIFICATIONS

- Programmable.
- Four serial interface ports for use with the ATARI 830™ Accoustic Modem and other EIA RS232C-compatible peripherals:
  - All have Send and Receive data signals. Port 1 has five additional control signals (Data Terminal Ready, Data Set Ready, Clear to Send, Request to Send and Carrier Detect).
  - Data Terminal Ready and Data Set Ready signal readiness on ports 2 and 3.
  - 20-mA current loop is connectable on port 4 for teletype.
- 8-bit parallel output interface port for use with the ATARI 825™ Printer (80-column).
- Automatic telephone answering when used with an appropriate modem.
- Full duplex operation.
- Programmable Baud rate on any port, including 75, 110, 134.5, 150, 300, 600, 1200, 1800, 2400, 4800, and 9600 bits per second. Baudot speeds of 60, 66, 75, and 100 words per minute.
- Serial communication via standard asynchronous start bit/stop bit.
- Uses standard ASCII for communciations with most computer related devices.
- Baudot support for radio-teletype (RTTY).
- One or two stop bits programmable.
- Even, odd, or no parity generation and checking is programmable.
- Serial interfaces meet EIA RS232C specifications and allow cable lengths up to 50 ft. (15 meters).
- To be used with your ATARI Personal Computer System, the ATARI 825 80-Column Printer and the ATARI 830 Modem must be connected through the ATARI 850 Interface Module.
- I/O Data Cord included.
- Power: AC transformer, UL approved, included, 120-VAC.
- Dimensions: 9 5/8" x 6 3/4" x 2"; 25 oz.
- Warranty: 90 days parts and labor.
- Service: Available at ATARI authorized service locations.

PERIPHERALS & ACCESSORIES

- ATARI 825 80-Column Printer
- ATARI 830 Acoustic Modem
- Cables:
  - ATARI I/O Data Cord, CX81 (5 feet)
  - Printer Cable, CX86 (included with ATARI 825)
  - Interface/Modem Cable, CX87 (included ATARI 830)
  - Interface/Terminal Cable, CX88



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